Exercise 1:

1.
Client ip = 192.168.1.102
Port = 1161

Server = 128.119.245.12
Port = 80

2.
232129013

3., 4.
pckt, seq num, send time, ack receive time, sRTT, eRTT, pckt length
1 = 232129013, 0.026477, 0.053937, 0.027460, 0.027460, 565
2 = 232129578, 0.041737, 0.077294, 0.035557, 0.028472, 1460
3 = 232131038, 0.054026, 0.124085, 0.070059, 0.033670, 1460
4 = 232132498, 0.054690, 0.169118, 0.114428, 0.043765, 1460
5 = 232133958, 0.077405, 0.217299, 0.139894, 0.055781, 1460
6 = 232135418, 0.078157, 0.267802, 0.189645, 0.072514, 1460

5.
win = 5840 for first packet
It keeps increasing (6780, 8760, 11680) so it means there is no lack of buffer space.
No, it doesn't throttle the sender.

6.
Identical sequence numbers.
Time sequence (stevens)

7.
If packets are received before an ack is sent, the acks are combined to save bandwidth.

8.
Amount of data sent divided by time = throughput

Subtract starting sequence number by final ack number:
232293103 - 232129013 = 164000 bytes
Time when first packet sent after connection is made minus final ack received time:
time = 5.455830 - 0.026477 = 5.429353 seconds
30,238.60 bytes per second or around 0.25 Mbs

Exercise 2:

1.
Initial seq num = 2818463618

2.
2818463619
Sequence number + packet length

3.
1247095791
Server's sequence number + packet length

No, there is no data as the sequence number is the same

4.
They have simultaneously decided to close the server. This is because he FINACK packets were sent before their respective ACKs

5.

SYN packet length = 1
FIN packet length = 1
653-618 = 35.
35 bytes minus SYN and FYN bytes
Therefore 33 bytes were transferred
Amount of data transferred is just final ack minus initial sequence number minus 2 (for the SYN and FYN bytes)